

UX DESIGN: STANDARDS, GUIDELINES & CONVENTIONS

Lavin*3506*Fall 2022

THOUGHTS...

- “People invariably object and complain whenever a new approach is introduced into an existing array of products and systems. Conventions are violated: new learning is required. The merits of the new system are irrelevant: it is the change that is upsetting. “ Norman p. 149
- What happens to your knowledge when a system changes?
 - In the head?
 - In the world?

INTERACTION DESIGN

- There's a fine line between an interaction that works and one that is usable.
- Great UX executes interaction well
- Question:
 - Is it better to design an aesthetically pleasing interaction or one that works? Which will lead to better success?

INTERACTION DESIGN

Interaction design (IXD) is defined by the Interaction Design Association (IXDA) as “the structure and behavior of interactive systems. Interaction designers strive to create meaningful relationships between people and the products and services they use, from computers to mobile devices to appliances and beyond.”

Experience is critical, for it determines how fondly people remember their interactions. —Don Norman

GREAT UX

- Simple clearly defined goals
- Strong purpose
- Intuitive
- Minimum necessary to complete the task





Location



Bookmark



Calendar



Home



Music



Watch



Computer



Folder



File



Search



Compose



Print



Trash



Video Player



Grid View



Camera



ID



Gift



Suitcase



Success



Menu

RECOGNITION RATHER THAN RECALL

DEFINITIONS

- **Convention:** a way in which something is usually done, especially within a particular area or activity; an established technique
- **Guideline:** a general rule, principle or piece of advice
- **Standard:** Used or accepted as normal, a level of quality or attainment

CONVENTIONS, GUIDELINES, STANDARDS

- Conventions
 - *Place the About menu on the right*
- Guidelines
 - Informal but widely used
 - Formal corporate guidelines
 - *The logo can only be used in XXX*
- Standards
 - Association or industry body
 - Government
 - Types
 - Accessibility
 - Networking
 - others

KNOWLEDGE

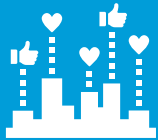


- *In the Head*
 - Memory
 - Efficient – Readily available
 - Requires Learning
 - Ease of use at first encounter is low
 - Designer has freedom – better UX

KNOWLEDGE



- *In the World*
 - Information is Perceivable, facts & rules
 - Interpretation substitutes for learning
 - Less efficient if you have to stop to learn
 - Ease of use at first encounter is high
 - Can be ugly – requires a deep skillset



Users have a finite capacity for retention/comprehension



Knowledge in the Head may be limited



Proper planning is required (adding future features)

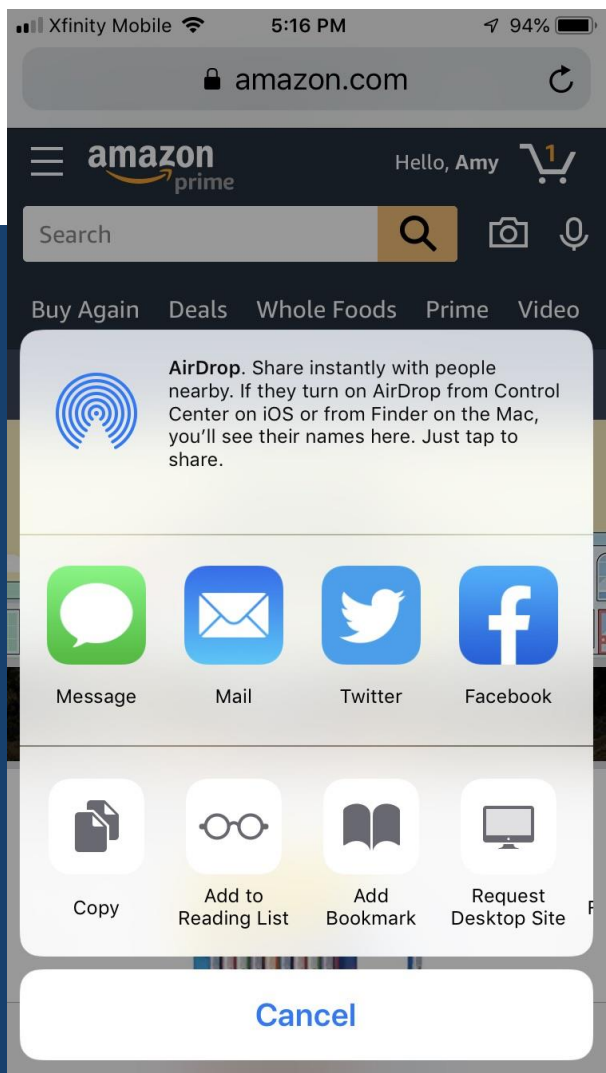
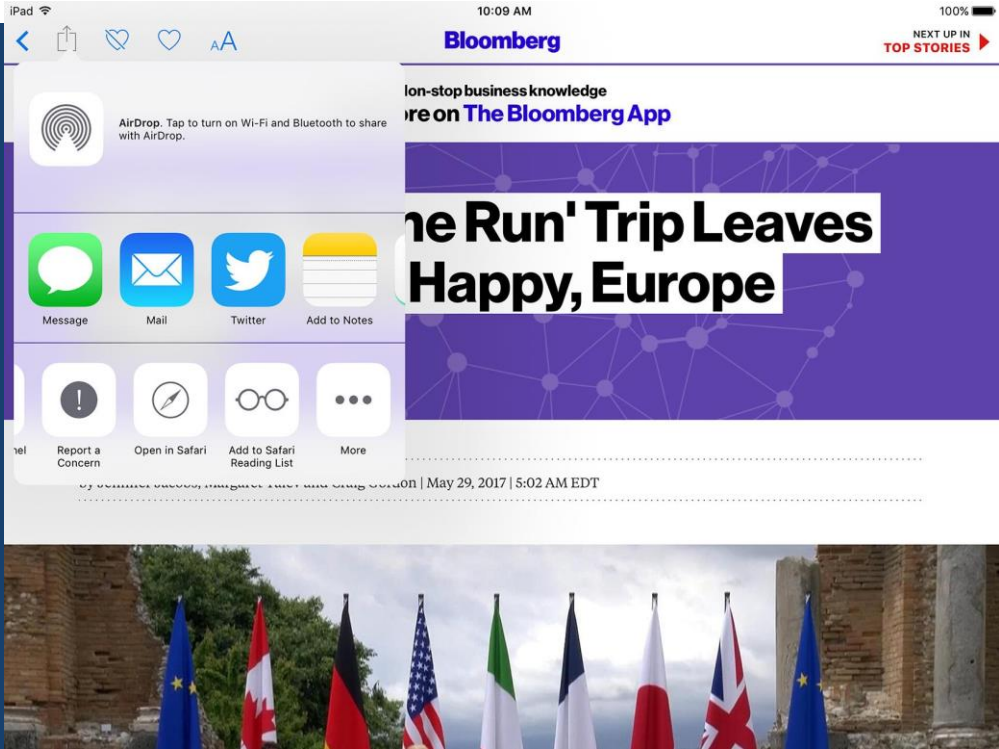
KNOWLEDGE IN THE HEAD
VERSUS
KNOWLEDGE IN THE WORLD

CONVENTIONS, GUIDELINES & STANDARDS

- To prevent user error and make an application easy to learn, it is essential that an interaction model be consistent. Consistency improves UX, general usability, and the efficiency with which users can use digital products.
- Consistency means using similar elements to achieve similar tasks, and having similar functions and behaviors throughout—a consistent interface is one that follows rules, such as using the same operation to do something.

EXAMPLES

- Conforming to a *convention* for example, may be in the way a page is laid out. Web users spend 69% of their time viewing the left half of the page and 30% viewing the right half. Therefore, a site is more likely to be profitable if it follows a conventional layout.
- A *standard* could be a breadcrumb trail (an orientation and navigation device that's immediately recognizable), or a global navigation menu across the top of the page as on the [BCC site](#).



APPLE

Modal Sheets

A custom modal sheet is a full-screen view that slides over your app's current screen. Use this type of sheet when you want to present a custom interface modally. The top-left corner of the modal sheet is reserved for the Close button, which dismisses the interface. The Close button is always white.



Retitle the Close button if doing so makes sense. Apple Watch supplies a default title for the Close button, but you can change it to convey a different meaning. The most common alternate titles for this button are Done and Dismiss.



Don't use "Back" or "<" in the Close button title. You don't want your custom Close button title to mislead users into thinking that the sheet is part of a hierarchical navigation interface.



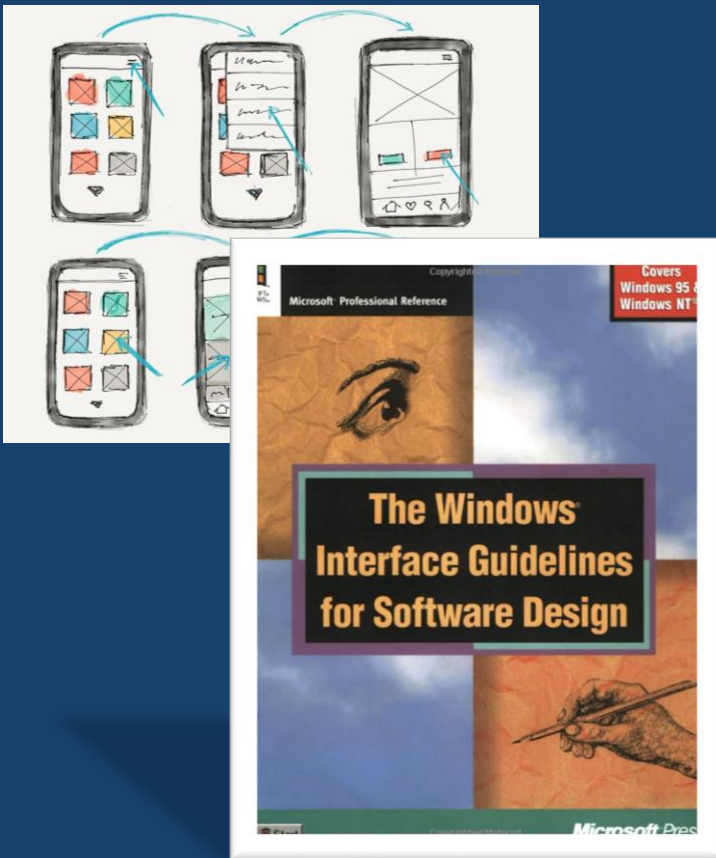
Don't use the Close button to title the page. If the Close button looks like a page or an app title, or if its title is empty, users won't know how to dismiss the modal sheet.



Avoid displaying a second modal sheet from an existing modal sheet. When users close a modal sheet, they expect to return to the main app interface.

More examples at: <https://developer.apple.com/design/tips/>

WINDOWS - GUIDELINES



[Fall] Syllabi - G... x | User Experience x | Coding Files - H... x | Quiz: ICA 12: Hi... x | Quickly Attendi... x | TYPE YOUR NA... x | Lavin x | Developer Guid... x

← → ↻ developer.android.com/guide

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Documentation

OVERVIEW GUIDES REFERENCE SAMPLES DESIGN & QUALITY

App Basics
Introduction
Build your first app
App fundamentals
App resources
App manifest file
App permissions overview

Devices
Device compatibility
Wear
Android TV
Android for Cars
Android Things
Chrome OS devices

Core topics
Activities
Architecture Components
Navigation component

Google is committed to advancing racial equity for Black communities. [See how.](#)

Android Developers > Docs > Guides ☆☆☆☆

Developer Guides

Welcome to the Android developer guides. These documents teach you how to build Android apps using APIs in the Android framework and other libraries.

If you're brand new to Android and want to jump into code, start with the [Build Your First App](#) tutorial.

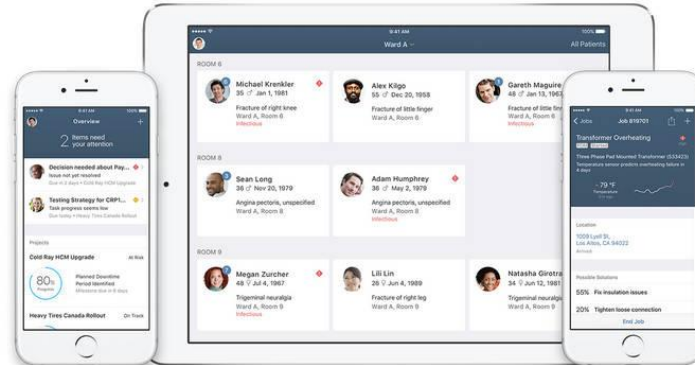
And check out these other resources to learn Android development:

- **Codelabs:** Short, self-paced tutorials that each cover a discrete topic. Most codelabs step you through the process of building a small app, or

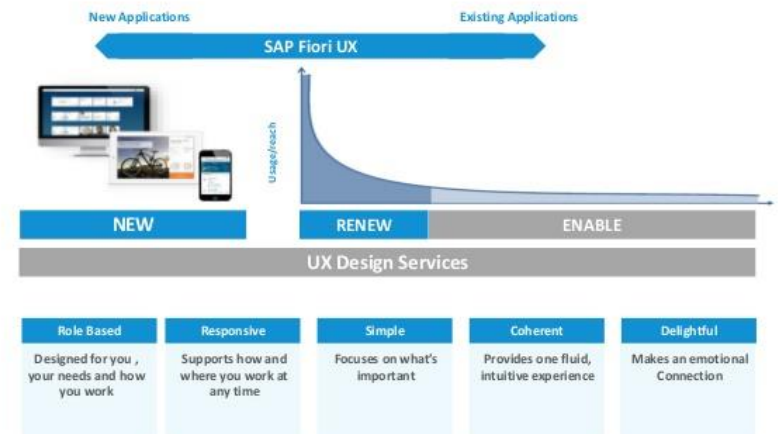
SAP

SAP Fiori for iOS

The iOS platform is one of the most advanced mobile platforms with the best native experience. It is only natural to unify the familiar experience of iOS with the best enterprise user experience of SAP Fiori.



SAP FIORI - UX Strategy and Advantages



STANDARDS



SUBMIT

JOIN US

Log in

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GET THE LATEST

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Get started

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SEARCH ▶

Search

LOG IN

Where's My Refund? ▶

Search

Q

SEARCH

Login



Search

Login

More

Feedback ▶

NEED HELP?

Submit

Apply

>

Search → Reset

Learn more

SEARCH

go

Login

Get Weather

Search

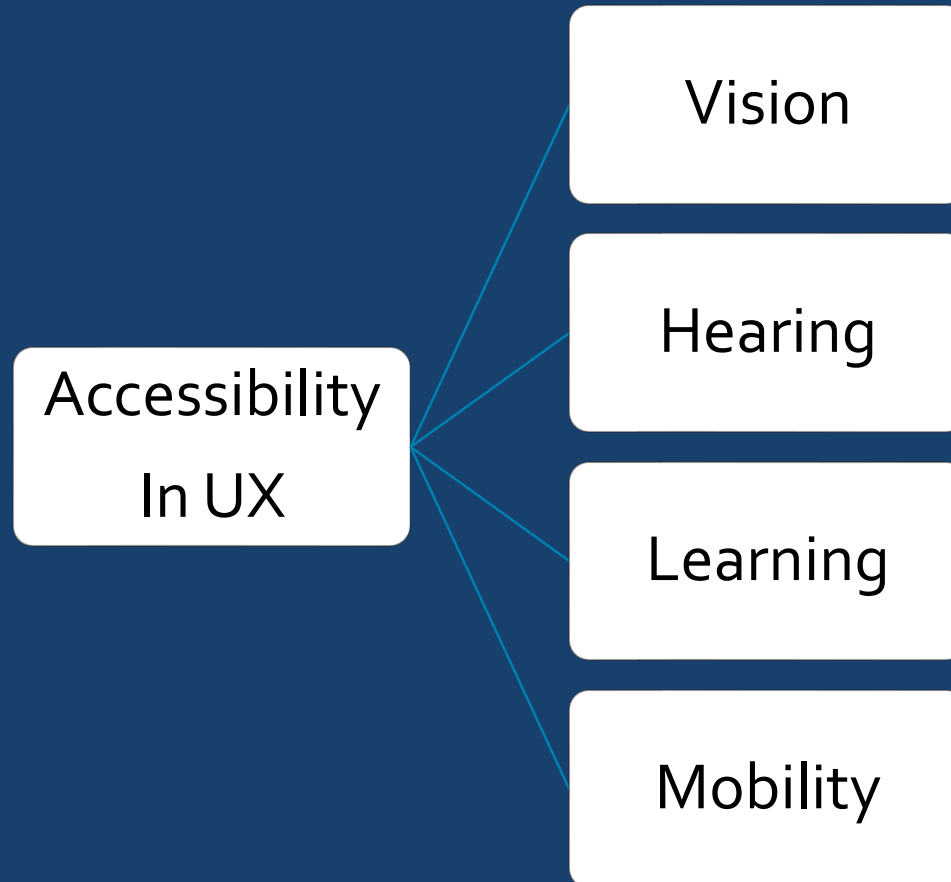
TRY OUR VISA WIZARD ▶

Search

All Outbreaks >

Search

ACCESSIBILITY



WEB CONTENT ACCESSIBILITY GUIDELINES

- WCAG – required for federal agencies and their contractors
 - Not required by law for private companies/contractors – BUT – their sites do have to be accessible
- Americans with Disabilities (1973) – most cited law in web accessibility compliance – access of a “technical standard” does not mean sites do not have to be accessible – WCAG provides reasonable accessibility
- General Rules:
 - Color coding or audio signals cannot be the only way of conveying information.
 - Biometrics cannot be the only method for users to identify themselves or control the system.
 - Software and hardware must support user controls for closed captions and audio descriptions.

ACCESSIBILITY – WCAG PRINCIPLES

Perceivable

Operable

Understandable

Robust

ACCESSIBILITY – WCAG

Perceivable: All users must be able to perceive your content. If there is audio or video content, you should provide text alternatives. If there is text content, you should provide audio alternatives or a way that assistive technology such as screen readers can consume it for the end-user.

Ask yourself: Is there anything on my site that a deaf, colorblind, low vision or blind user would not be able to perceive?

Operable: All users must be able to operate your site. Most users with disabilities use a keyboard to surf the web using character key shortcuts along the way to navigate, interact with, and access content. Your site should be forgiving to your users if they make a mistake, offering ways to retract, correct, and confirm information.

Ask yourself: Can my site be navigated and operated solely through a keyboard? Do users have control of interactive elements on my site? Are tasks on my site able to be easily and successfully completed?

ACCESSIBILITY - WCAG

Understandable: Screen orientation, consistent layout, gesture customization, element placement and indication. Actionable elements must be clearly indicated.

Ask yourself: Is there anything on my site that a user would not be able to understand how to operate?

Robust: Keyboard functions should match the operation, zoom, captions and larger fonts must be offered.

Ask yourself: Can my site be navigated and operated solely through a keyboard? Do users have control of interactive elements on my site? Are tasks on my site able to be easily and successfully completed?

EXAMPLE

- The alt attribute is the HTML attribute used in HTML to specify alternative text (alt text) that is to be rendered when the element to which it is applied cannot be rendered.
- The alt attribute is used by "screen reader" software so that a person who is listening to the content of a webpage (for instance, a person who is blind) can interact with this element. Every image should have an alt attribute to be accessible, but it need not contain text. It can be an empty or null attribute: alt=

QUESTION

- What is the ALT attribute?
 - Convention
 - Guideline
 - Standard?





Navigate to any website –
poke around



What are some standards,
conventions, guidelines that
are employed? Why? How
does this enable a
pleasurable experience?



What are some guidelines,
standards, conventions you
can use in your own design?

ICA - DISCUSSION